



# THE Agricultural Situation

NOVEMBER 1949

Volume 33 Number 11

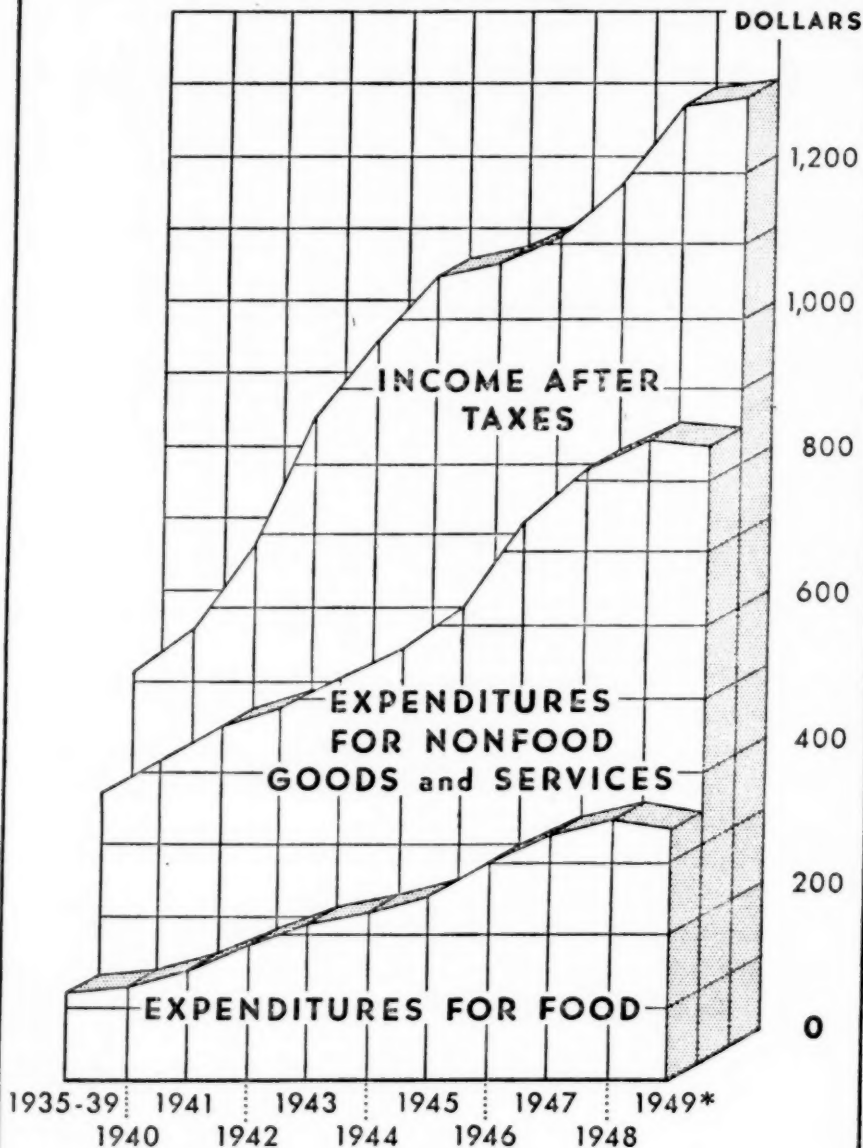
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[ The AGRICULTURAL SITUATION is sent free to crop and price reporters in connection with their reporting work ]

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A monthly publication of the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C. The printing of this publication has been approved by the Director of the Budget, February 4, 1949. Single copy 5 cents, subscription price 50 cents a year, foreign 70 cents, payable in cash or money order to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

# CONSUMER INCOME and EXPENDITURES PER PERSON



\*ANNUAL RATE FOR FIRST 6 MONTHS

# Consumers Cut Food Spending More Than Other Expenditures

**T**HE AMOUNT of money spent for food per person by United States consumers declined in the first half of 1949 for the first time since 1938. Food expenditures in the first 6 months of this year were at an annual rate of \$346 compared with \$359 last year and an average of \$119 for 1935-39.

As the chart on the opposite page shows, spending for food per person increased more rapidly from 1940 to 1948 than expenditures for other goods and services. During the first half of this year, however, food expenditures dropped off faster than spending for nonfood items. Consumers appear to be placing more emphasis on the purchase of automobiles and other nonfood goods and services, and on savings.

Disposable income per person—the amount left after personal taxes have been paid—continued to rise into 1949. Since food expenditures have declined, the proportion of disposable income spent for food dropped off for the first time since 1941. In the first half of 1949, consumers spent 27 percent of their disposable income for food com-

pared with 28 percent last year and the 1935-39 average of 23 percent.

The rise in food prices over the last decade accounts for only part of the increase in the consumer's annual food bill. The remainder of the gain is largely due to larger quantities bought. In addition, the quality of food purchased seems to have improved.

For example, the table below shows that food expenditures per person increased from an average of \$119 in 1935-39 to \$359 in 1948. However, if consumers had purchased the same quantity and quality of food as in 1935-39, it would have cost them only \$262, and would have taken only 20 percent of their disposable income. The difference of \$117 is the cost of the increased quantity and improved quality of food bought.

The decline in food expenditures from 1948 to 1949, however, is due chiefly to lower prices. The quantity of food purchased has remained about the same.

V. John Brensike

*Bureau of Agricultural Economics*

## Food Cost Per Person Compared With Disposal Income

Year	Actual food expenditure		Cost to consumer of annual quantity of food bought in 1935-39	
	Dollars	As percent of disposable income	Dollars	As percent of disposable income
1935-39.....	119	23	119	23
1940.....	129	23	113	20
1941.....	150	22	125	18
1942.....	186	22	150	17
1943.....	213	22	171	18
1944.....	230	22	171	16
1945.....	251	23	175	16
1946.....	298	27	201	18
1947.....	338	28	248	21
1948.....	359	28	262	20
(1st half) 1949.....	346	27	250	19

# Ironing the *Seasonal* out of *Milk Production*

**S**EASONAL fluctuations in production of milk and milk prices bring many problems to the dairy farmer—problems of farm efficiency, utilization of resources, income, market needs and many others.

In meeting these problems, a dairyman must first decide what seasonal distribution of milk production will return the greatest profit on his farm. Should he increase production in the fall when milk prices are high, or in the spring when costs are usually lowest? This question must be answered by each farmer according to his farm's resources and his market for milk. For example, producers who sell milk for fluid consumption probably will find it more profitable than others to produce milk at relatively even rates throughout the year.

Once a farmer has settled on the best seasonal distribution, he has still the problem of obtaining this distribution. Many farmers have considerable difficulty in managing their herds to obtain production at desired rates during different seasons.

## Interview Farmers

To discover why these problems exist and to find ways to overcome them, 507 dairymen in the Boston milkshed recently were interviewed. The survey was one phase of a broader study conducted cooperatively by the Agricultural Experiment Stations of Massachusetts, New Hampshire and Vermont, the Boston Milk Market administrator, and the Bureau of Agricultural Economics. It was financed under the Research and Marketing Act.

In general, the farmers interviewed produced milk at highest rates in the spring and at lowest rates during the fall and winter, though production on many farms varied considerably from this pattern. Even on those which had highest rates in the spring and lowest rates in the fall, the extent to which

production fluctuated from one season to the next differed widely.

Some of the differences in seasonal distribution of milk production result from differences in plans of farmers. But a majority of them probably are due to the inability of farmers to completely control production rates. Most of the farmers interviewed were not satisfied with the seasonal distribution of milk production on their farms.

Seasonal production control can be obtained by regulating the time when the dairy cows freshen and by controlling the feeding, housing and care of the animals. Farmers generally considered the time when cows freshen the most important factor. The study revealed that seasonal distribution of milk production depended considerably on the time when cows freshened.

## Time Freshening to Resources

Farmers interviewed controlled time of freshening on their farms to some extent in order to adjust milk production to their resources. Farms adapted to a more intensive type of operation had a larger-than-average proportion of fall freshening cows. Therefore, they produced milk on a more even seasonal basis. The farms on the best land and those nearest to market tended to operate more intensively and more of their cows freshened in the fall.

Specialized dairy farms had more fall-freshening cows than farms with other important sources of income. On the other hand, farms with better pasture feed for their cows had a somewhat larger than average share of spring freshening cows.

Small farms tended to have more fall-freshening cows than did large farms. This probably does not indicate that these operators were more inclined to plan for evenly distributed milk production, but is a result of other factors.

Purchase and sale of cows was not particularly important as a means for

bringing about seasonal adjustments in rate of milk production on the farms studied.

Several herd management practices appeared to be more closely related to time of year when cows freshened than did farm resources. One-eighth of the farmers interviewed allowed the bull to run with the cows during the pasture season. A large share of the freshenings on these farms occurred in early spring and milk production showed extremely wide seasonal fluctuation. Most of the farmers who had fall-freshening dairies were holding some of their cows until late in the year before breeding. Use of younger cows and heifers was another means for maintaining evenly distributed production. The age of cows in the fall freshening dairies was much less than average.

A major reason why many farmers were unable to control their breeding programs was the widespread inability to detect cows in heat during the barn feeding season. Most of the farmers who turned their cows out daily in winter avoided this trouble, and those who attempted to control season of freshening had an unusually large share of fall freshening cows.

### Turned Out for Watering

The most important reason for turning cows out in winter was for watering however, and not to make it easier to detect animals in heat. Farmers who had watering cups in their barns were much less successful in obtaining fall freshening cows than those who turned cows out. Most of the larger farms were equipped with watering cups. Therefore, they had less success in breeding for fall freshening than smaller farms where the practice of turning cows out daily was more common.

Failure of cows to breed satisfactorily was not due to the time of year they were bred. This type of trouble also did not depend upon turning cows out or exercising them in winter. Farmers who followed both practices had about the same amount of trouble breeding cows as other farmers.

Farmers who had Holsteins had considerably more trouble detecting cows in heat and also in breeding them than

did farmers who had Guernsey or Jersey cows. Careful, systematic farm operators controlled their breeding programs more successfully than less capable managers.

Quality and type of feed also influenced materially rates of milk production during different months of the year. Farmers who fed good hay maintained fall milk production much better than those who fed poor hay. Also, farmers who fed their best hay during the first part of the barn-feeding season were better able to hold fall production at satisfactory levels than were those who fed their poorest hay first.

### Feeding Practices Help

Feeding of silage during the winter helped to maintain milk production as did the use of substantial quantities of grain. Improved summer and fall pastures made considerable difference in the rates of milk production during the months of July to October. But there seemed to be little carry-over effect from pasture after cows went onto barn feeding. Dairy herds that ran on poor, or unimproved pasture during the late summer dropped off in production rapidly after the June peak.

Farmers with good housing for the dairy herd were able to maintain milk production at a higher level during the winter than were farmers that provided poorer housing, even though herd freshening dates were the same.

Younger dairy cows as well as those with higher rates of production produced milk on a more even seasonal basis than older or lower producing cows.

### Satisfactory Control Possible

Application of these findings should enable farmers to have a fair degree of control over their seasonal milk production problems. Farmers interviewed who planned their breeding program carefully, turned cows out in winter, and who fed cows according to good practices were able to satisfactorily control the seasonal distribution of milk production on their farms.

H. Alan Luke

Formerly, Maine Agricultural  
Experiment Station



# Most Households Use Citrus

## IN LOUISVILLE, NELSON COUNTY

**P**RACTICALLY all of the households in Louisville and Nelson County, Ky., use some citrus fruit a recent survey of consumer preferences reveals.

In the survey, more than a thousand interviews were taken in Louisville and Nelson County which is primarily a rural area. The study was financed with funds appropriated under the Research and Marketing Act.

In both urban and rural households, the most popular fresh items were oranges and lemons while the most popular canned product was orange juice. Difference in urban and rural use was greatest for grapefruit. The proportion of homemakers in Nelson County using this product was considerably smaller than in Louisville.

### Taste Most Important

Use of citrus products in Louisville was not particularly related to family income. In Nelson County, however, consumption tended to increase as the income level rose. In both the urban and rural areas, families with children tended to use more fresh oranges and less fresh grapefruit than other families.

The use of a citrus product seemed to be determined by the interaction of a number of factors, such as, taste, health, habit, expense and availability. Taste was probably the most influential, particularly if negative. Consumers who did not like the taste of a product were not likely to use it, even though they knew it had other values.

The health qualities of citrus products were, of course, important to many consumers. Practically everyone agreed that citrus products contained some special food values, though many were unable to name them. Cost and lack of availability seemed to reduce use of citrus fruits more in Nelson County than in Louisville.

About half of the homemakers in each area said they were serving about the same amount of citrus as before the war. When asked whether they would like to use more citrus, half of them said they thought the amount being served was sufficient. Two out of 3 who would have liked to use more, said they would do so if prices were lower. Among those who said they were using a different amount than before the war, most had increased consumption.

### Prefer Unpackaged Fruit

Most of the homemakers in each area preferred to buy fresh oranges and grapefruit loose out of a bin rather than in a package or sack. They claimed that the unpackaged fruit was of better quality while the packages often contained fruit of uneven quality, some of it even being spoiled. There seemed to be little doubt that when shopping for citrus products most homemakers wanted to select their own fruit. The habit of selecting a given number of oranges or grapefruit or lemons was deep-seated. This was true even when the fruit was priced by the pound.

### Prefer Seedless Grapefruit

Preferences of those who used fresh grapefruit were divided fairly evenly between fruit with white meat and that with pink or red. Most of the homemakers preferred the seedless variety, primarily because it is easier to prepare. Seven out of 10 who used either canned orange juice or canned blends said they preferred that these particular products be sweetened.

James A. Bayton

Florence K. Nierman

*Bureau of Agricultural Economics*

# Almost Half of U. S. Farms Have a Truck or a Trailer

**N**EARLY half of the farms in this country have a motor truck or a trailer, according to a survey of agriculture made by the Bureau of Agricultural Economics. This equipment is used to haul more than 45 percent of the total tonnage of farm products moved from farms to initial markets.

In 1948 when the survey was made, it was estimated that there were 1.9 million trucks on United States farms, 28 percent more than in 1945. Last year, more than 1 farm in every 4 had a truck. About a fifth of them were postwar models but more than half dated back to 1939 or earlier. The average farm truck was one-half year older than the average truck on the highway. Four out of 10 of the farm trucks had a rated capacity not exceeding one-half ton.

The number of farms with trucks varied from more than half in Western States to about one-fifth in the South. From 1945 to 1948, the number of trucks on farms in the South increased more than in other areas but remained below the national average.

By types of farms, the proportion of farms with trucks varied widely over the country, ranging from 17 percent of all tobacco farms to half of all wheat farms. Half the dairy farms in both the Northeast and West and about a third of the poultry farms in both the Northeast and West have trucks.

As might be expected, the percentage of farms with trucks tends to increase as the farm size increases. Almost twice the percentage of farms 100 acres and over in size have trucks as do the smaller farms.

One of the most surprising findings in the survey was the fact that more than a fourth of the farms in the country had a trailer. Farmers apparently substitute trailers for trucks since relatively few farms had both. Further-

more, farms with a truck or a trailer, seldom had more than one hauling unit. Among the farms with trucks, 9 out of 10 had only 1; of those with trailers, about 8 out of 10 own only 1.

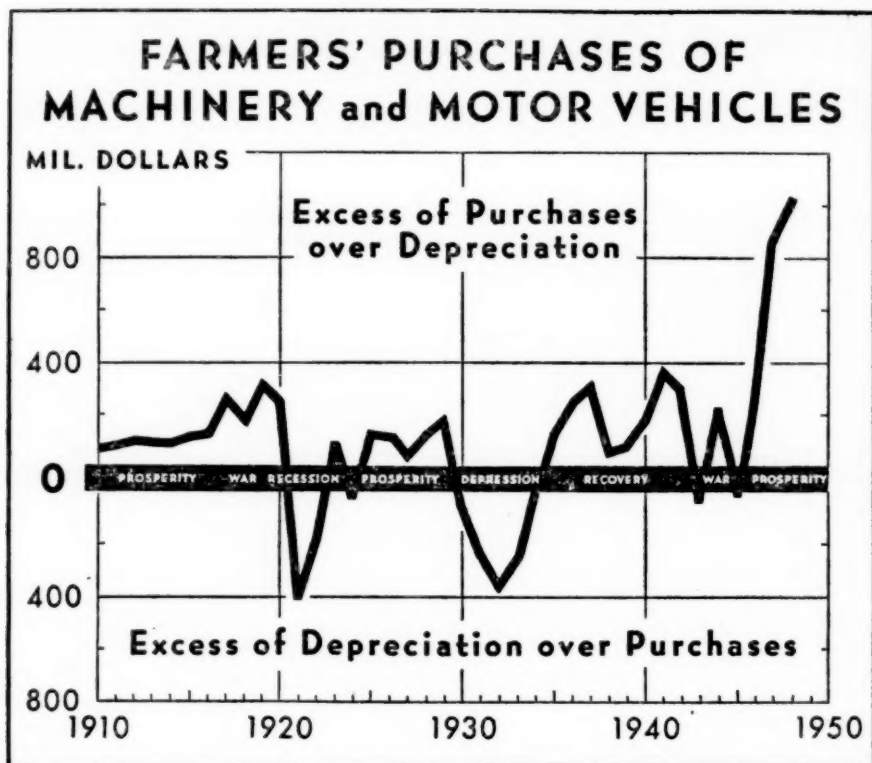
About half of all wheat farms reported trailer ownership in 1948, a larger proportion than for any other type of farm for the country as a whole. Grain, cattle and dairy areas which are concentrated largely in the North Central and Western States, have in general a higher than average proportion of farms with trailers.

Increasing use of farm-owned trucks and trailers has just about pushed the wagon out of the picture in all except some southern areas. Only 2½ percent of the total tonnage of farm products hauled from farms to initial markets is carried in wagons. Hired equipment for which farmers pay a specific transportation charge hauls about a third of this total tonnage while buyers' equipment accounts for about 22 percent. The remainder is hauled in trucks and trailers owned by farmers.

In general, farm-owned equipment is particularly important in transporting grain, cotton, fruits, vegetables and miscellaneous crops from farms to initial markets. Hired equipment is used principally for livestock and milk. In the case of milk, much of the "hired" haulage probably is performed by buyers or truckers hired by buyers and a specific transportation charge is paid by producers.

For the country as a whole, buyers' equipment is used chiefly to haul poultry and eggs. However, automobiles are used extensively by farmers to transport poultry and eggs to market, though information on this was not obtained in the survey.

Margaret R. Purcell  
*Bureau of Agricultural Economics*



## Farmers' Machinery Purchases Important Key to Prosperity

**T**HE ABOVE chart illustrates an economic lesson important to the well-being of both farm and city people. It shows that in time of prosperity, farmers buy machinery and motor vehicles faster than the equipment they have on hand wears out. In depressed times, on the other hand, depreciation exceeds investment.

In most years from 1910 through 1943, purchases of farm machinery and motor vehicles average about 7 percent of receipts from farming. In 1932, the rock-bottom year of the depression of the thirties, these purchases were equal to only 4 percent of cash receipts. Purchases also were low compared with receipts during World War II when production of farm machinery and motor vehicles was sharply reduced. In 1948

when farmers' receipts were a record, purchases equalled 11 percent of receipts.

The chart indicates clearly that agriculture has provided a strong market for machinery and motor vehicles whenever demand for farm products is strong. This tends further to strengthen demand for farm products since high investment by farmers means more employment and higher consumer incomes for city people than otherwise would be the case. In this way, investment expenditures by farmers contribute to a high level of economic activity, both on the farm and in the city.

The record level of farmers' cash receipts since 1946 reflects this tendency. Farmers have been buying modern ma-



chinery and vehicles as fast as they have come off the assembly lines. As long as farmers' cash receipts continue near present levels, these purchases are likely to continue near the rate of the last two years.

A decline in farmers' cash receipts, on the other hand, is almost certain to result in a more cautious attitude on the part of farmers. They will tend to

postpone buying machinery and motor vehicles as long as possible. This could lead to lower employment and incomes in cities and a weaker demand for farm products. Thus, one of the important props supporting present high level activity would be removed.

Robert H. Masucci

*Bureau of Agricultural Economics*

## Food Exports Again Set a Record

UNITED STATES exports of food set a record in 1948-49 for the fourth consecutive year.

The 49,521,000,000 pounds of food shipped to foreign countries during 1948-49 is 15 percent more than in the previous year and more than 5 times the average tonnage exported in 1935-39. Exports accounted for more than 16 percent of the food distributed during the 12 months.

Exports of grains made up 32 percent of the total tonnage of food shipped abroad, an even larger proportion than in other postwar years. The dollar shortage tended to stimulate purchases of grains by European countries since these products provide food energy at lower cost than most other foods.

Exports of wheat and wheat products (grain equivalent) totaled 30,084,000,000 pounds, up more than 3 percent from 1947-48. Rice exports amounted to 912,000,000 pounds, the same as a year earlier while shipments of other grains—corn, barley, grain sorghums, oats, rye and their products—totalled 9,553,000,000 pounds, almost double those of a year earlier.

Fats and oils exports also showed a definite increase last year, chiefly because of the increase in supplies of United States vegetable oils and animal fats. The 889,000,000 pounds shipped abroad was almost 60 percent larger than in 1947-48. Shipments of fruits, vegetables, potatoes, dry edible beans and peas, soybeans and peanuts and similar foods totaled 7,153,000,000 pounds, a 10 percent gain over the previous year.

The only food groups for which exports were less in 1948-49 than the

previous year were meats and dairy products. Meat shipments amounted to only 73,000,000 pounds, less than in each of the 3 preceding years and 40 percent less than the 1935-39 average. Exports of cheese, canned milk and dried milk totaled 857,000,000 pounds. While this was smaller than in any other postwar year, it was more than 20 times the 1935-39 average.

Countries participating in the European recovery program took 63 percent of our food exports in 1948-49. Far Eastern countries received 19½ percent to rank second, while the Latin-American Republics with 9.2 percent were third. Among individual countries or areas, the area of Germany occupied by the United States and Britain took the largest share of our food exports with Far East areas under American military control ranking second.

Financial gifts and loans by the United States Government again contributed significantly to record food exports. These gifts and loans financed from 55 to 60 percent of shipments in 1948-49. Financing by military agencies of food exported for civilian feeding in occupied areas continue to make up a large part of gifts and loans.

The United States Department of Agriculture procured almost two-thirds of the total food exported in 1948-49. The food was acquired either specifically for export programs or under price support operations. United States military agencies and countries receiving assistance through Economic Cooperation Administration depended heavily on the Department for procurement of many foods.

Harry Sherr

*Bureau of Agricultural Economics*

## Where We Stand

# Activity High Despite Declines

**N**EARLY all measures of economic activity trended downward this year after rising sharply during the 3 preceding years of postwar inflation. However, most of the declines have not been large.

The table below portrays the extent of the declines in the various measures of economic activity from 1948 to 1949. Figures for this year, of course, are partly estimated. One of the largest declines in the last year was in industrial production as measured by the Federal Reserve Board index. The drop of almost 10 percent was largely due to a sharp reduction in business purchases for inventories. The effect of this drop was partly offset by continued high activity in many other fields, particularly construction, agriculture, trade and the various services. Total output of goods and services this year probably declined only one or two percent from 1948. Civilian employment was off only about 1½ percent.

Prices of farm products, both at

wholesale and at the farm, were down more than nearly all other groups of commodities. This showed up only slightly in terms of food costs of urban consumers.

Farm income also showed substantial drops from 1948. With farm cash income down 9 percent and production costs dropping only slightly, realized net income of farm operators was off 16 percent from last year.

By all prewar standards, economic activity remains at very high levels. With the United States population up 16 percent, employment is almost a third higher than in 1935-39. Consumer income, which held up well in 1949, is about 200 percent above the prewar level. The net income of farm operators has shown a somewhat larger increase from prewar years. Similar gains are shown by other measures of business activity.

N. Koffsky

Bureau of Agricultural Economics

## How Economic Activity Compares With 1948 and Prewar

Item	Estimated 1949 percentage change from	
	1935-39 average	1948
Total civilian employment.....	+31	-2
Unemployment.....	-62	+71
Industrial production.....	+73	-10
Consumers' prices (urban).....	+68	-2
Food.....	+100	-5
Nonfood.....	+50	(1)
Wholesale prices, all commodities.....	+90	-7
Farm products.....	+118	-12
Food products.....	+104	-10
All except farm and food.....	+81	-3
Prices received by farmers.....	+136	-12
Prices paid, interest and taxes.....	+91	-2
Parity price ratio.....	+23	-10
Farm cash income, excluding Government payments.....	+246	-9
Realized net income of farm operators, excluding Government payments.....	+221	-16
Volume of farm marketings.....	+44	+1
Personal income.....	+207	-1
Disposable personal income.....	+190	+1.0

<sup>1</sup> Less than ½ percent.

# City Families Are Eating Better Than in 1942

**WHAT** are the postwar food habits of city families? How do these habits differ from those before World War II? What share of the weekly incomes of these families go for food now compared with prewar?

To answer these questions, the Bureau of Human Nutrition and Home Economics asked 1,600 housekeeping families of 2 or more persons living in 68 cities with populations of 2,500 or more, for information as to the foods they consumed during one week in the spring of 1948.

Compared with a similar survey in 1942, certain facts stand out. The table below shows average amounts of groups of foods consumed per household per week in the 2 years. The average size of households in 1942 was 3.34 persons; in 1948, 3.42.

Consumption of citrus fruit and tomatoes by urban families increased 8 percent from the spring of 1942 to the spring of 1948. These families also ate 21 percent more of other vegetables and fruit; 23 percent more milk or its equivalent; 12 percent more meat, poultry, and fish; 38 percent more eggs; and 49 percent more sugar and sweets. Only one food—potatoes—showed a marked drop.

In 1942, food took 26 percent of the income of these families. By 1948 the food share was 32 percent. Higher prices accounted for a part of this rise, but the larger purchases of food caused a part of it.

Relative differences among income

groups in foods consumed last year were about the same as in 1942 except for two food groups. Compared with the higher income families, those with lower incomes consumed more citrus fruit and tomatoes and more meat, poultry and fish than in 1942.

Families with higher incomes used a great many more frozen fruits and vegetables than did those in the lower income groups. Higher income families also ate more fresh fruit. Quantities used rose steadily from an average of 5.8 pounds a week for households with incomes under \$1,000 to 17.8 pounds for those with \$7,500 and more.

Consumption of canned fruits, vegetables and soups increased as income climbed until it reached about \$4,000, then leveled off or declined.

Quantities of milk bought, fluid or in cheese, cream and ice cream, increased a little faster than did meat, poultry, and fish. From the lowest income families to the highest, milk used rose from 10 to 20 quarts a week. Meat rose from 7½ to 13.9 pounds.

The higher income groups also ate more fresh vegetables, eggs, and nuts than the lower income groups; about the same quantity of potatoes and sweetpotatoes, sugars and sweets, and fats and oils; less flour and fewer bakery products; and less dried fruit and vegetables.

Esther M. Colvin

*Bureau of Agricultural Economics*

## How Food Consumption in 1948 Compared With 1942

	1942	1948
Leafy, green and yellow vegetables.....pounds..	7. 69	7. 63
Citrus fruit, tomatoes.....do.....	10. 96	11. 80
Potatoes, sweetpotatoes.....do.....	8. 83	7. 26
Other vegetables and fruits.....do.....	11. 11	13. 43
Milk equivalent.....quarts.....	12. 93	15. 92
Meat, poultry, and fish.....pounds.....	9. 21	10. 29
Eggs.....dozen.....	1. 41	1. 94
Dry beans and peas, nuts.....pounds.....	. 89	. 94
Grain products (flour equivalent).....do.....	9. 00	9. 34
Fats and oils.....do.....	3. 72	3. 80
Sugars, sweets.....do.....	3. 26	4. 86

# How the Stripper Performs

## in low yielding cotton

**M**ORE LIGHT on the question of whether harvesting cotton by machine is a paying proposition for farmers has been shed in a study made during the 1948 season in the Texas high plains area by the Texas Agricultural Experiment Station and the Bureau of Agricultural Economics.

The 1948 season on the high plains provided an opportunity to study the performance of cotton-stripping machines under conditions of low yields and a fairly tight labor supply. Dryland cotton averaged only 100 pounds of lint per acre while irrigated cotton averaged 375 pounds per acre.

Labor was never abundant and in dryland areas was often scarce. The usual wage rate for the first snapping was \$1.75 for irrigated cotton and \$2 for dryland cotton. Usual wage rates for snapping after one or more previous harvestings was \$2 on irrigated land and \$2.25 on dryland.

### Study 64 Farms

The study is one of a series on the economics of cotton mechanization being carried on in various parts of the Cotton Belt under the Research and Marketing Act.

Farmers in the high plains have 4,000 to 4,500 strippers which harvested 15 to 20 percent of the 673,000 bales of cotton produced in 1948. Information on the performance of strippers compared with hand harvesting was obtained from 64 farms, all of which used two-row single roller type machines.

On these farms, 45 percent of the dryland acreage and 8 percent of the irrigated acreage was harvested exclusively by machines. On most of the irrigated land, stripping was used largely as a scrapping operation, thus salvaging cotton, some of which otherwise would have been lost.

Farmers operated their strippers an average of 7½ hours a day, harvesting an average of 16½ acres of dryland cotton and 13 acres of irrigated cotton. The machines studied harvested an

average of 195 acres, or 36 bales, each during the season.

As has been found in other studies, waste losses ran somewhat higher when cotton was harvested by stripper than when snapped by hand. However, the amount of lint lost per acre from stripping was not excessive.

Results of this study, as of others, also showed that machine-harvested cotton graded lower than hand-harvested cotton. Much of the difference is due to the fact that machines cannot get into the fields until the frost has caused the leaves to drop. However, cotton can be harvested by hand before frost when the grade is higher. This points up the fact that the development of a practical defoliant would greatly aid the advance of cotton mechanization.

### Compare 4 Methods

In the study, four methods of harvesting are compared from the standpoint of their effect on the value of cotton obtained per acre of deducting harvesting and ginning costs. Those methods are: (1) Cotton was snapped twice, the first time between October 1 and October 15, the second time during November 1 to November 15; (2) Cotton was snapped once—November 1 to November 15; (3) Cotton was machine stripped once November 16 to November 30; (4) Cotton was snapped once from October 1 to October 15 and then stripped November 16 to November 30.

The most significant point concerning dryland cotton is the small differences in the value of cotton obtained by the 4 methods. This occurred despite the fact that machine costs were higher during the 1948 season because of the low cotton yields. Machine costs per acre are almost as much as when yields are low as when high, and consequently much higher per bale.

An important advantage of the stripper to dryland farmers during the 1948 season was the fact that many found

it impossible to hire hands to harvest their low yielding cotton. Offers as high as \$3.50 per hundred were turned down in some cases. Under these conditions, machine stripping has distinct advantages. Without their machines, some farmers would have had to pay very high wages or leave their cotton unharvested.

On the irrigated land the study shows very little difference between a combination of snapping and stripping, and machine stripping only. But the advantage of the stripper over hand harvesting was definite, despite higher waste and grade losses.

The study indicates that farmers should take yields into account as well as the comparative costs of hand labor and machine operation in deciding whether to use machines for harvesting. Other considerations that are important are weather conditions during the season and prospects for cotton prices.

M. N. Williamson

*Texas Agricultural Experiment Station*

R. H. Rogers

*Bureau of Agricultural Economics*

## Outlook Highlights

. . . NOVEMBER 1949

### Devaluation To Have Small Effect

Devaluation by Great Britain and other foreign nations in September is not expected to have a marked effect on prices received by United States farmers in the near future.

Britain devalued her pound 30.5 percent and Canada her dollar 9 percent. Before devaluation, it took \$4.03 to buy a pound; now it takes only \$2.80. Most other devaluations were about the same percentage as Britain's.

The immediate effect of devaluation is a tendency to drive down the dollar price of a commodity being traded and to increase its price in the devalued currency. The extent to which these tendencies actually develop depend on a number of factors such as demand, supply, wages, trade restrictions, and price supporting or regulating activities.

As far as farm products are concerned, the effects of devaluation are not expected to be great. The devaluing countries last year took 70 percent of our agricultural exports, the most important of which were cotton, wheat and tobacco. United States prices of these 3 commodities are close to Government-support levels and will not fall significantly.

Most of our exports of wheat, cotton and tobacco are financed under the ECA program. This makes it unlikely that foreign takings will be reduced much in the near future.

### Farm Wages Decline

In late September, 12,913,000 persons were at work on farms, over a million more than in August but slightly less than in September a year ago.

Farm wages have continued downward and on October 1, the average rate for the United States was 59 cents an hour compared with 62 cents a year earlier.

### Plenty of Cranberries

Cranberries will be plentiful for Thanksgiving tables this season. Though the crop is down from last

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## Across-the-Board Study

The above study is part of an across-the-board program of research in 15 Southern States now in its second year.

The full-scale effort, made possible by the Research and Marketing Act, is designed to completely mechanize all phases of cotton production—from disposal of previous crop residue through preparation of the seedbed and control of weeds to stripping or picking, storage and ginning.

The program integrates the entire field with individual States taking certain segments, and farm machinery and cotton gin manufacturers and the agricultural chemical and fertilizer industries cooperating. Research on varietal and other plant problems related to mechanization, such as defoliation, is also under way in the various States, with parallel studies aimed at development of more effective equipment and operating methods.

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## Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State]

Commodity	5-year average		Oct. 15, 1948	Sept. 15, 1949	Oct. 15, 1949	Parity price Oct. 15, 1949
	August 1909- July 1914	January 1935- December 1939				
Wheat (bushel).....dollars..	0.884	0.837	1.98	1.87	1.89	2.12
Rye (bushel).....do.....	.720	.554	1.43	1.27	1.28	1.73
Rice (bushel).....do.....	.813	.742	<sup>1</sup> 2.13	1.70	1.73	1.95
Corn (bushel).....do.....	.642	.691	1.38	1.16	1.69	1.54
Oats (bushel).....do.....	.399	.340	.699	.613	.623	.958
Barley (bushel).....do.....	.619	.533	1.10	1.05	1.07	1.49
Sorghum grain (100 pounds).....do.....	1.21	1.17	1.99	1.80	1.72	2.90
Hay, baled (ton).....do.....	( <sup>2</sup> )	11.20	23.00	21.00	21.50	---
Cotton (pound).....cents.....	12.4	10.34	<sup>1</sup> 31.08	29.70	28.70	29.76
Cottonseed (ton).....dollars.....	22.55	27.52	63.70	43.50	41.80	54.10
Soybeans (bushel).....do.....	<sup>2</sup> .96	.954	2.27	2.14	2.09	<sup>4</sup> 2.30
Peanuts (pound).....cents.....	4.8	3.55	10.4	10.2	10.2	11.5
Flaxseed (bushel).....dollars.....	1.69	1.69	5.74	3.63	3.44	4.06
Potatoes (bushel).....do.....	<sup>5</sup> .697	.717	1.42	1.38	1.30	1.76
Sweetpotatoes (bushel).....do.....	.878	.897	2.07	2.30	1.96	2.11
Apples (bushel).....do.....	.96	.90	2.20	1.82	1.43	2.30
Oranges on tree (box).....do.....	<sup>6</sup> 2.29	1.11	1.60	.66	1.59	3.60
Hogs (hundredweight).....do.....	7.27	8.38	24.70	19.90	17.60	17.40
Beef cattle (hundredweight).....do.....	5.42	6.56	21.20	20.00	19.50	13.00
Veal calves (hundredweight).....do.....	6.75	7.80	23.80	22.40	21.90	16.20
Lambs (hundredweight).....do.....	5.88	7.79	21.90	21.60	21.50	14.10
Butterfat (pound).....cents.....	26.3	29.1	<sup>1</sup> 67.7	61.7	62.1	63.1
Milk, wholesale (100 pounds).....dollars.....	1.60	1.81	<sup>1</sup> 4.92	4.02	<sup>7</sup> 4.16	3.84
Chickens (pound).....cents.....	11.4	14.9	29.9	24.4	23.2	27.4
Eggs (dozen).....do.....	21.5	21.7	54.7	52.5	51.4	51.6
Wool (pound).....do.....	18.3	23.8	48.0	46.9	46.3	43.9

<sup>1</sup> Revised.

<sup>2</sup> Prices not available during base period.

<sup>3</sup> Comparable base price, August 1909-July 1914.

<sup>4</sup> Comparable price computed under the Steagall amendment.

<sup>5</sup> 1919-28 average of \$1.12 per bushel used in computing parity.

<sup>6</sup> 1919-28 average for computing parity price.

<sup>7</sup> Preliminary.

year's record, it is estimated to be 21 percent above average. In barrels, this means 805,000 this year compared with nearly 968,000, in 1948.

### Cattle Feeding Record Possible

Feeder cattle have been moving into the Corn Belt at a record rate since July 1. This and other developments indicates that the volume of cattle feeding this year will be as high, or perhaps even higher, than last year's record.

### First Half Exports Up

During the first half of 1949, we shipped \$2,000,000,000 worth of farm products abroad, a fifth more than a year earlier and only 5 percent less than the record for the first half of 1947. Exports during the second half are expected to be down somewhat from the first half level.

### Bean Stocks a Record

The third largest crop of dry edible beans on record was in prospect the first of September. In addition, stocks of old beans at the beginning of 1949 crop marketing season were a record and several times larger than prewar.

### Lumber Production Down

About 31,000,000,000 board feet of lumber is expected to be produced in 1949, about 13 percent less than in either 1947 or 1948. Nevertheless, the saw timber drain on United States forests is still 1½ times saw timber growth.

Wholesale lumber prices also have dropped off, 1948. In August, they averaged 13 percent below a year earlier, but still about 3 times the 1937-38 average.

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# Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39=100) <sup>1</sup>	Total income of industrial workers (1935-39=100) <sup>2</sup>	1910-14=100					Index of prices received by farmers (August 1909-July 1914=100)			
			Average earnings of factory workers per worker	Wholesale prices of all commodities <sup>3</sup>	Prices paid by farmers			Livestock and products			
					Commodities	Commodities, interest, and taxes	Farm wage rates <sup>4</sup>	Dairy products	Poultry and eggs	Meat animals	All livestock
1910-14 average	58	50	100	100	100	100	100	100	101	101	101
1915-19 average	72	90	152	158	151	150	148	148	154	163	158
1920-24 average	75	122	221	160	161	173	178	159	163	123	142
1925-29 average	98	129	232	143	155	168	179	160	155	148	154
1930-34 average	74	78	179	107	122	135	115	105	94	85	93
1935-39 average	100	100	199	118	125	128	118	119	109	119	117
1940-44 average	192	238	325	139	150	147	212	162	146	171	164
1945 average	203	291	403	154	180	172	350	197	196	210	203
1946 average	170	275	392	177	202	193	378	242	198	256	240
1947 average	187	332	440	222	246	221	408	269	221	340	293
1948 average	192	364	475	241	264	250	432	297	236	371	320
1948											
October	195	378	488	242	263	249	427	289	260	373	323
November	195	376	489	239	262	248	-----	284	272	351	314
December	192	374	493	237	262	248	-----	283	260	339	305
1949											
January	191	362	489	234	260	248	438	275	240	330	295
February	189	354	486	231	257	245	-----	264	218	315	280
March	184	346	481	231	258	246	-----	254	217	335	287
April	179	340	473	229	258	246	410	240	221	333	282
May	174	332	474	227	257	245	-----	234	217	328	277
June	169	-----	226	227	257	245	-----	230	213	331	277
July	162	-----	224	256	244	425	-----	236	214	324	275
August	170	-----	223	254	243	-----	-----	243	226	317	276
September	-----	-----	224	253	242	-----	-----	249	237	326	284
October	-----	-----	251	240	240	403	-----	255	231	308	276

Year and month's	Index of prices received by farmers (August 1909-July 1914=100)								Parity ratio <sup>5</sup>	
	Crops							All crops and live-stock		
	Food grains	Feed grains and hay	To-bacco	Cotton	Oil-bearing crops	Fruit	Truck crops			All crops
1910-14 average.....	100	101	102	96	98	99	-----	99	100	100
1915-19 average.....	193	164	187	168	187	125	-----	168	162	106
1920-24 average.....	147	126	192	189	149	148	143	160	151	86
1925-29 average.....	140	119	172	145	129	141	140	143	149	89
1930-34 average.....	70	76	119	74	72	94	106	86	90	66
1935-39 average.....	94	95	175	83	106	83	102	97	107	84
1940-44 average.....	123	119	245	131	159	133	172	143	154	103
1945 average.....	172	161	366	171	215	220	224	201	202	117
1946 average.....	201	195	382	228	244	226	204	228	233	121
1947 average.....	271	246	380	261	335	194	249	291	278	120
1948 average.....	250	249	387	259	326	157	238	250	287	115
1948										
October.....	226	192	418	251	270	174	176	227	277	111
November.....	234	181	412	246	283	157	186	224	271	109
December.....	236	184	415	239	283	164	209	228	268	108
1949										
January.....	232	187	412	236	274	180	282	238	268	109
February.....	221	173	412	235	244	181	285	233	258	105
March.....	224	178	411	232	242	189	263	232	261	106
April.....	227	178	410	241	238	207	236	236	260	106
May.....	227	174	411	242	231	215	213	234	256	104
June.....	212	168	412	243	219	211	175	225	252	103
July.....	207	171	412	243	205	194	185	220	249	102
August.....	204	166	407	236	225	160	174	212	245	101
September.....	210	167	400	240	213	143	205	211	249	103
October.....	212	163	403	231	208	155	170	206	243	101

<sup>1</sup> Federal Reserve Board represents output of mining and manufacturing; monthly data adjusted for seasonal variation.

<sup>2</sup> Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on pay rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised August 1948.

<sup>3</sup> Preliminary. <sup>4</sup> Ratio of prices received to prices paid for commodities, interest and taxes. <sup>5</sup> 1924 only.

## OUTLOOK HIGHLIGHTS

(Continued from page 14)

### Big Fats and Oils Supply

Despite reduced soybean and peanut crops this year, output of fats and oils from domestic materials is likely to top last year's total of 11.6 billion pounds. Increase in output of lard and greases from the large 1949 pig crop will more than make up the decline in vegetable output.

### Dairy Consumption Holds Up

The 5-year decline in the number of milk cows which ended this year left it the lowest in history compared with the population. However, consumption per person of all dairy products, except butter, is well above prewar. Consumption of several products such as evaporated milk, cheese and nonfat dry milk solids is at or near record levels.

Record milk production per cow and more complete utilization of nonfat ingredients of milk has partly offset the decline in the number of cows.

### Huge Crop Output Assured

With many crops already harvested and others about to be, total crop output near last year's record is practically assured. Production this year is nearly a third above the 1923-32 average compared with 37 percent last year.

Few individual crops set new records this year. Instead, high output is well distributed among the commodities and among the various areas of the country.

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